

### ABSTRACT OF THE DISCLOSURE

Each packet of the present invention is assigned a priority level. The current data packet flow rate is detected. This data packet flow rate is quantized into at least one data rate level. The current buffer circuit depth is determined as is the priority associated with the current data  
5 packet. The probability that the current packet is either dropped or used is determined by using the current data packet service flow rate, the data packet priority, and the current buffer circuit depth.